# Work Order ID 107061

*107061*

*Tuesday, September 17, 2013 11:47:50 AM*



**Item ID:** D6101-005 **Accept** *N900040100* **Setup Start** *NS1*

**Revision ID:** **Stop** *NS2*

**Item Name:** Saddle Billet

**Start Date:** 9/17/2013 **Start Qty:** 40.00 *40*

**Required Date:** 9/23/2013 **Req'd Qty:** 40.00 *40*

**Reference:**

**Cust Item ID:**

**Customer:**

**Run Start** *NR1*

**Stop** *NR2*

**Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

**QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| **Draw Nbr** | **Revision Nbr** | | | | | | | | |
| D6101 | Rev B | | | | | | | | |
| 100 | | 0.00 | | | | | | | |
| *100* | PURCHASING | | | | | | | | |
| Purchasing | **Memo** | 0.00 | | | | | | | |
| Purchasing | Issue P/O: 21455<br>a)Description: Alluminum billet<br>b) 5.00" x 8.250" x 2.50" thick<br>c) Tolerance on all dimensions are +0.030"/-0.000"<br>d) Grain direction along 5.00" length<br>e) Material: 7075-T7351 (QQ-A-250/12)<br>f)Material certification required | | | | | | | | |
| 110 | Receive & Inspect for Damage & Mat'l Certs | 0.00 | | | | | | | |
| *110* | | | | | | | | | |
| Packaging | **Memo** | 0.00 | | | | | | | |
| Packaging | Ensure material certification is attached | | | | | | | | |

CL 13/09/23 (40)

13/19/3 (40)

DQA: _____ Date: _____

NCR: Yes / No

# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

**DISPOSITION**

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

**AGAINST DEPARTMENT/PROCESS**

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐
- ☐

| Root Cause | | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|---|---|---|---|---|---|---|---|---|---|
| Doc/Data | ☐ | | | | | | | | | |
| Equip/Tooling | ☐ | | | | | | | | | |
| Operator | ☐ | | | | | | | | | |
| Material | ☐ | | | | | | | | | |
| Setup | ☐ | | | | | | | | | |
| Other | ☐ | | | | | | | | | |
| Process | ☐ | | | | | | | | | |
| Supplier | ☐ | | | | | | | | | |
| Training | ☐ | | | | | | | | | |
| Unapproved | ☐ | | | | | | | | | |

**FAULT CATEGORY**

**Landing Gear**

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

**General**

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

**Work Order ID 107061** *107061* 

*Tuesday, September 17, 2013 11:47:50 AM*

**Item ID:** D6101-005 **Accept** *N900040100* **Setup Start** *NS1*

**Revision ID:** **Stop** *NS2*

**Item Name:** Saddle Billet

**Start Date:** 9/17/2013 **Start Qty:** 40.00 *40* **Cust Item ID:**

**Required Date:** 9/23/2013 **Req'd Qty:** 40.00 *40* **Customer:**

**Reference:**

**Run Start** *NR1*

**Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Stop** *NR2*

**QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| 120 | QC6- Inspect dimensions to drawing | 0.00 | ok 13/10/03 | | | 40 | 0 | | |
| *120* | | | | | | | | | |
| QC | **Memo** | 0.00 | | | | | | | |
| Quality Control | Ensure Material certification comply to Dwg D6101 | | | | | | | | |
| 130 | Identify as per dwg & Stock Location: 41 | 0.00 | ok 13/10/03 | | | 40 | 0 | | |
| *130* | | | | | | | | | |
| Packaging | **Memo** | 0.00 | | | | | | | |
| Packaging | | | | | | | | | |
| 140 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| *140* | | | | | | | | | |
| QC | **Memo** | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

13-10-4

13-10-4

DQA: _____ Date: _____

NCR: Yes / No

# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

**DISPOSITION**

| | |
|---|---|
| Rework | ☐ |
| Scrap | ☐ |
| Use-as-is | ☐ |
| Work Order Update | ☐ |

**AGAINST DEPARTMENT/PROCESS**

| | | | |
|---|---|---|---|
| Skid-tube ☐ | Crosstube ☐ | Water Jet ☐ | Engineering ☐ |
| Machining ☐ | Small Fab ☐ | Prod. Eng. Coor. ☐ | Quality ☐ |
| Thermoforming ☐ | Finishing ☐ | Rec/Store/Packaging ☐ | Other ☐ |
| Large Fab ☐ | Composite ☐ | Supplier ☐ | ☐ |

| Root Cause | | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|---|---|---|---|---|---|---|---|---|---|
| Doc/Data | ☐ | | | | | | | | | |
| Equip/Tooling | ☐ | | | | | | | | | |
| Operator | ☐ | | | | | | | | | |
| Material | ☐ | | | | | | | | | |
| Setup | ☐ | | | | | | | | | |
| Other | ☐ | | | | | | | | | |
| Process | ☐ | | | | | | | | | |
| Supplier | ☐ | | | | | | | | | |
| Training | ☐ | | | | | | | | | |
| Unapproved | ☐ | | | | | | | | | |

**FAULT CATEGORY**

**Landing Gear**

- ☐ Bending
- ☐ Centre Not Concentric to O/S
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- ☐ Cuffs
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- ☐ Ripples in Bend
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**General**

- ☐ Bend
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- ☐ Countersink
- ☐ Cut Too Short
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- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
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- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

# Picklist Print

*Tuesday, September 17, 2013 11:47:49 AM*



**Work Order ID:** 107061
**Parent Item:** D6101-005
**Parent Item Name:** Saddle Billet

**Start Date:** 9/17/2013 **Required Date:** 9/23/2013
**Start Qty:** 40.00 **Required Qty:** 40.00

**Comments:** IPP A: 01.05.04New IsueEC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **D6101-005P**<br>7075-T7351 8.25X5.0X2.5 | | Purchased | No | | | 110 | Each | 0.0000 | 1 | 40 | | | |

9/23/13 (40)

DQA: _____ Date: _____

NCR: Yes / No

# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

**DISPOSITION**

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- Engineering ☐
- Quality ☐
- Other ☐
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|---|---|---|---|---|---|---|---|---|---|---|
| Doc/Data | ☐ | | | | | | | | | |
| Equip/Tooling | ☐ | | | | | | | | | |
| Operator | ☐ | | | | | | | | | |
| Material | ☐ | | | | | | | | | |
| Setup | ☐ | | | | | | | | | |
| Other | ☐ | | | | | | | | | |
| Process | ☐ | | | | | | | | | |
| Supplier | ☐ | | | | | | | | | |
| Training | ☐ | | | | | | | | | |
| Unapproved | ☐ | | | | | | | | | |

**FAULT CATEGORY**

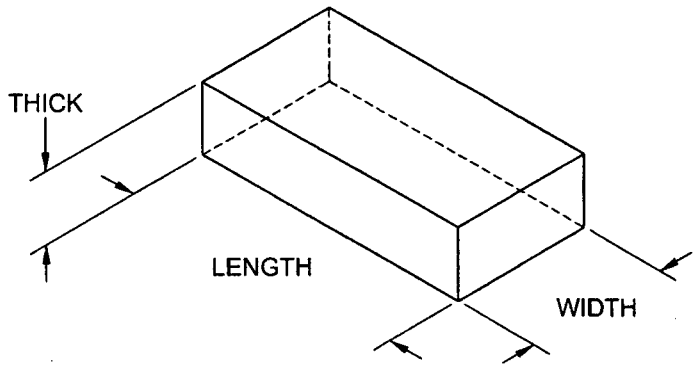
**Landing Gear**

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- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

# SPECIFICATION CONTROL DRAWING




PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

CL 13/09/17
W10.10706e1

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

B ACCEPTABLE SPECIFICATIONS FOR 7075-T7351 ALUMINUM ARE AMS-QQ-A-250/12, QQ-A-250/12, OR ASTM B209

| Part No. | Alloy | Length | Width | Thick | Grain Direction |
|---|---|---|---|---|---|
| D6101-001 | 7075-T7351 (QQ-A-250/12) | 6.000 | 6.250 | 2.000 | Along 6.000 Length |
| D6101-003 | 7075-T7351 (QQ-A-250/12) | 7.875 | 6.250 | 2.000 | Along 7.875 Length |
| D6101-005 | 7075-T7351 (QQ-A-250/12) | 5.000 | 8.250 | 2.500 | Along 5.000 Length |
| D6101-007 | 7075-T7351 (QQ-A-250/12) | 7.750 | 8.250 | 2.500 | Along 7.750 Length |
| D6101-009 | 7075-T7351 (QQ-A-250/12) | 8.700 | 8.250 | 2.500 | Along 8.700 Length |
| D6101-011 | 7075-T7351 (QQ-A-250/12) | 9.700 | 8.250 | 2.500 | Along 9.700 Length |
| D6101-013 | 7075-T7351 (QQ-A-250/12) | 10.100 | 8.250 | 2.500 | Along 10.10 Length |
| B D6101-015 | 7075-T7351 (QQ-A-250/12) | 9.450 | 6.250 | 2.500 | Along 9.450 Length |
| B D6101-017 | 7075-T7351 (QQ-A-250/12) | 6.350 | 6.250 | 2.250 | Along 6.350 Length |
| | | | | | |
| | | | | | |

RELEASED
09/07/15/NW

13/09/03

| REV. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| B | ADDED D6101-015/-017, ADD ASTM B209 | RF | 09.04.23 |
| A | NEW ISSUE | CP | 01.03.30 |

| | | | |
|---|---|---|---|
| DESIGN | CP | **DART AEROSPACE LTD** | |
| DRAWN | RF | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | | DRAWING NO. D6101 | REV. B |
| MFG. APPR. | | | SHEET 1 OF 1 |
| APPROVED | | TITLE SADDLE BILLET, 7075 | SCALE NTS |
| DE APPR. | | | |
| DATE | 09.04.23 | | |

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DQA: _____ Date: _____

NCR: Yes / No

# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

**DISPOSITION**

- Rework ☐
- Scrap ☐
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- Work Order Update ☐

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- Quality ☐
- Other ☐

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|---|---|---|---|---|---|---|---|---|---|---|
| Doc/Data | ☐ | | | | | | | | | |
| Equip/Tooling | ☐ | | | | | | | | | |
| Operator | ☐ | | | | | | | | | |
| Material | ☐ | | | | | | | | | |
| Setup | ☐ | | | | | | | | | |
| Other | ☐ | | | | | | | | | |
| Process | ☐ | | | | | | | | | |
| Supplier | ☐ | | | | | | | | | |
| Training | ☐ | | | | | | | | | |
| Unapproved | ☐ | | | | | | | | | |

**FAULT CATEGORY**

**Landing Gear**

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- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

_____

_____

_____

Castle Metals®

A. M. Castle & Co.

# BORDEREAU DE MARCHANDISES



No de Formulaire d'Emballage / Shipment No:1904431

| Expédié de / Ship From: | Vendu à / Sold To: | Expédié à / Ship To: | Livré à / Deliver To: |
|---|---|---|---|
| A. M. Castle & Co. (Canada) Inc.<br>MONTREAL - CASTLE METALS<br>835-SELKIRK AVENUE<br>POINTE CLAIRE, QUEBEC<br>H9R 3S2 | DART AEROSPACE LTD<br>1270 ABERDEEN<br>HAWKESBURY, ON K6A 1K7<br>CA | DART AEROSPACE LTD<br>1270 ABERDEEN<br>HAWKESBURY, ON K6A 1K7 CAN | DART AEROSPACE LTD<br>1270 ABERDEEN<br>HAWKESBURY, ON<br>K6A 1K7<br>CA |

| Date d'expédition / Date Shipped | F.O.B. | Modalités de transport / Freight Terms | Transporteur / Carrier | No du Bon de connaissement / BOL No |
|---|---|---|---|---|
| 02-OCT-2013 | ORIGIN | Prepaid | MANITOULIN | 1904431-2 |

**Détails d'expédition / Shipment Details** | **Destination finale / Final Destination Branch** - MON

| N° de commande / Order No | N° de ligne Line No | N° d'article / Item No | Description |
|---|---|---|---|
| 3054685 | 1 | 752241 | 2.5000.PL.7075.T7351.ALUMINUM.USI.48.5000.144.5000<br>SPECIFICATIONS: QQ-A-250/12 |

| N° de bon de commande / Purchase Order No | N^bre de pièces / Part Number | Qté commandée / Ordered Qty | Qté Facturée / Invoice Qty |
|---|---|---|---|
| 21455 | YOUR ITEM NUMBER:<br>D6101-005 | 53.32 LBS | 53.3200 LBS |

GM 13/10/03

**Détails / Details**

| N° de livraison / Delivery No : | Usine / Mill | No de coulée / Heat Number | Code méc / Mech Id | Pièces / PCS | Largeur (Pouce)/ Width (IN) | Longueur (Pouce)/ Length (IN) | Qté expédiée/ Shipped Qty(LBS) |
|---|---|---|---|---|---|---|---|
| 119232057 | KAISER ALUMINUM | 641303A3 | | 5 | 5.0000 | 8.2500 | 53.3200 |

Ces marchandises/technologies sont sujettes aux règlements de l'Export Administration et du département d'état des États-Unis. Si elles ont été/sont exportées, elles doivent se conformer à ces règlements. Toute modification du contrat de transport contraire aux lois des États-Unis est interdite.
These commodities/technologies are subject to US Export Administration & US State Dept. Regulations and, if intended for export, were/are exported thereunder. Diversion contrary to US Law is Prohibited.

Nous certifions par la présente que le matériel couvert par cette certification est conforme aux spécifications susmentionnées et aux exigences applicables pour le matériel, y compris toute spécification faisant partie de la description. Les rapports d'essai sont archivés pour fins de consultation. Toute requête concernant du matériel défectueux sera rejetée à moins qu'elle ne soit faite par écrit à A. M. Castle & Co. dans les 60 jours suivant la livraison. Le matériel coupé sur mesure ou coupé par le client ne peut être retourné pour crédit.
We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

| Ce matériel a été reçu et inspecté par<br>Reviewed by Authorized Castle Metals Representative: | | Date: | Name: |
|---|---|---|---|

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Date Printed: 02-OCT-2013 11:47:11 AM

SHIP TO:
A M CASTLE & CO
14001 ORANGE AVE
P.O. BOX 1402
PARAMOUNT, CA 90723

SOLD TO:
AM CASTLE & CO- SOLD TO
1420 KENSINGTON RD
SUITE 220
OAK BROOK, IL 60523

KAISER ALUMINUM
Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

# CERTIFIED TEST REPORT

**Serial Number**
4298676

| CUSTOMER PO NUMBER: | WORK PACKAGE: | CUSTOMER PART NUMBER: | SHIP RUN/LOAD: | GOV'T CONTRACT NUMBER: |
|---|---|---|---|---|
| 219455 | | 752241 | 102644/15 | |

| KAISER ORDER NO: | LINE ITEM: | SHIP DATE: | ALLOY: | CLAD: | TEMPER: | PRODUCT DESCRIPTION: |
|---|---|---|---|---|---|---|
| 1151938 | 1 | 22-MAY-2013 | 7075 | BARE | T7351 | Kaiser Select® Plate |

| WEIGHT SHIPPED: | QUANTITY: | TRUCK B/L #: | GAUGE: | DIAMETER/WIDTH: | LENGTH: |
|---|---|---|---|---|---|
| 1802 LB | 1 PCS EST. | 2042428 | 2.5000 IN (63.5000 MM) | 48.500 IN (1231.9 MM) | 144.500 IN (3670.3 MM) |

MHU 1684645: LOT 641303A3: 1 pieces;

## Certified Specifications

AMS 4078/RevJ
ASTM B 209/Rev10
BSS 7055/RevA
DPS 4.713/RevAK
GSS16100/RevG/Amd1
AMS-QQ-A-250/12
ASTM B 594/Rev09
CMMP 025/RevU
EAC MS1011/RevE
MMS 159/RevT
AMS-STD-2154/RevA
BAC 5439/RevH
CSTI 006/RevD
GAMPS 9101/RevB
PS 21211/RevL

**Test Code: 4297**

## Test Results

**Lot: 641303A3** **Cast 531** **Drop 08** **Ingot 1** **Melted in USA**

(ASTM E8/B557)
(EN 2002-1)

| Tensile: | Temper | Dir / # Tests | Ultimate KSI (MPA) | Yield KSI (MPA) | Elongation % |
|---|---|---|---|---|---|
| | T7351 | LT / 2 (Min:Max) | 69.8 : 70.8 (481 : 488) | 57.8 : 58.6 (399 : 404) | 11.5 : 11.7 |

(ASTM E1004)
(EN 2004-1)

| | | |
|---|---|---|
| Conductivity %IACS : | 41.2 Min | 41.5 Max |
| (MS/M) : | 23.9 Min | 24.1 Max |

(ASTM E1251)

| Chemistry: | SI | FE | CU | MN | MG | CR | ZN | TI | V | ZR | | OTHER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Actual(wt%) | 0.08 | 0.21 | 1.5 | 0.03 | 2.5 | 0.20 | 5.7 | 0.03 | 0.01 | 0.02 | TOT | 0.05 |

13/10/03

KAISER ALUMINUM
Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

# CERTIFIED TEST REPORT

Serial Number
4298676

## ALLOY LIMITS

| 7075 | SI | FE | CU | MN | MG | CR | ZN | TI | V | ZR | OTHER | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MIN(wt%) | 0.00 | 0.00 | 1.2 | 0.00 | 2.1 | 0.18 | 5.1 | 0.00 | 0.00 | 0.00 | EACH | 0.05 |
| MAX(wt%) | 0.40 | 0.50 | 2.0 | 0.30 | 2.9 | 0.28 | 6.1 | 0.20 | 0.05 | 0.05 | TOT | 0.15 |

Aluminum Remainder

## TEST NOTES

Metal represented by this test report was 100% immersion ultrasonically tested from one side with 3mm dead zones top and bottom and meets the Class A and Class B requirements of all specifications referenced on this test report. No surface marking of sonic indications is performed.

AEROSPACE AMS-31 CL

## CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC (Kaiser) hereby certifies that metal shipped under this order was melted in the United States of America or a qualifying country per DFARS 225.872-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content. This material has been inspected, tested and found in conformance with the requirements of the applicable specifications as indicated herein. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. All metal which is solution heat treated complies with AMS 2772. Any warranty is limited to that shown on Kaiser's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of Kaiser Aluminum Fabricated Products, LLC laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law. ISO-9001:2000 certified.

JAMES HEMENWAY, LABORATORIES SUPERVISOR

Castle Metals®

A. M. Castle & Co.

# BORDEREAU DE MARCHANDISES



No de Formulaire d'Emballage / Shipment No:1904431

| Expédié de / Ship From: | Vendu à / Sold To: | Expédié à / Ship To: | Livré à / Deliver To: |
|---|---|---|---|
| A. M. Castle & Co. (Canada) Inc.<br>MONTREAL - CASTLE METALS<br>835-SELKIRK AVENUE<br>POINTE CLAIRE, QUEBEC<br>H9R 3S2 | DART AEROSPACE LTD<br>1270 ABERDEEN<br>HAWKESBURY, ON K6A 1K7<br>CA | DART AEROSPACE LTD<br>1270 ABERDEEN<br>HAWKESBURY, ON K6A 1K7 CAN | DART AEROSPACE LTD<br>1270 ABERDEEN<br>HAWKESBURY, ON<br>K6A 1K7<br>CA |

| Date d'expédition / Date Shipped | F.O.B. | Modalités de transport / Freight Terms | Transporteur / Carrier | No du Bon de connaissement / BOL No |
|---|---|---|---|---|
| 02-OCT-2013 | ORIGIN | Prepaid | MANITOULIN | 1904431-2 |

**Détails d'expédition / Shipment Details** | **Destination finale / Final Destination Branch** - MON

| N° de commande / Order No | N° de ligne Line No | N° d'article / Item No | Description |
|---|---|---|---|
| 3054685 | 2 | 752241 | 2.5000.PL.7075.T7351.ALUMINUM.USI.48.5000.144.5000<br>SPECIFICATIONS: QQ-A-250/12 |

| N° de bon de commande / Purchase Order No | Nbre de pièces / Part Number | Qté commandée / Ordered Qty | Qté Facturée / Invoice Qty |
|---|---|---|---|
| 21455 | YOUR ITEM NUMBER:<br>D6101-005 | 373.30 LBS | 373.3000 LBS |

GM 13/10/03

**Détails / Details**

| N° de livraison / Delivery No : | Usine / Mill | No de coulée / Heat Number | Code méc / Mech Id | Pièces / PCS | Largeur (Pouce)/ Width (IN) | Longueur (Pouce)/ Length (IN) | Qté expédiée/ Shipped Qty(LBS) |
|---|---|---|---|---|---|---|---|
| 119232057 | KAISER ALUMINUM | 641806A5 | | 35 | 5.0000 | 8.2500 | 373.3000 |

Ces marchandises/technologies sont sujettes aux règlements de l'Export Administration et du département d'état des États-Unis. Si elles ont été/sont exportées, elles doivent se conformer à ces règlements. Toute modification du contrat de transport contraire aux lois des États-Unis est interdite.
These commodities/technologies are subject to US Export Administration & US State Dept. Regulations and, if intended for export, were/are exported thereunder. Diversion contrary to US Law is Prohibited.

Nous certifions par la présente que le matériel couvert par cette certification est conforme aux spécifications susmentionnées et aux exigences applicables pour le matériel, y compris toute spécification faisant partie de la description. Les rapports d' essai sont archivés pour fins de consultation. Toute requête concernant du matériel défectueux sera rejetée à moins qu'elle ne soit faite par écrit à A. M. Castle & Co. dans les 60 jours suivant la livraison. Le matériel coupé sur mesure ou coupé par le client ne peut être retourné pour crédit.
We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

| Ce matériel a été reçu et inspecté par<br>Reviewed by Authorized Castle Metals Representative: | | Date: | Name: |
|---|---|---|---|

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to US law prohibited.

Date Printed: 02-OCT-2013 11:47:11 AM

KAISER ALUMINUM
Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

# CERTIFIED TEST REPORT

Serial Number
4297648

## ALLOY LIMITS

| | SI | FE | CU | MN | MG | CR | ZN | TI | V | ZR | OTHER | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7075 | | | | | | | | | | | | |
| MIN(wt%) | 0.00 | 0.00 | 1.2 | 0.00 | 2.1 | 0.18 | 5.1 | 0.00 | 0.00 | 0.00 | EACH | 0.05 |
| MAX(wt%) | 0.40 | 0.50 | 2.0 | 0.30 | 2.9 | 0.28 | 6.1 | 0.20 | 0.05 | 0.05 | TOT | 0.15 |

Aluminum Remainder

## TEST NOTES

Metal represented by this test report was 100% immersion ultrasonically tested from one side with 3mm dead zones top and bottom and meets the Class A and Class B requirements of all specifications referenced on this test report. No surface marking of sonic indications is performed.

AEROSPACE M-31 CA

## CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC (Kaiser) hereby certifies that metal shipped under this order was melted in the United States of America or a qualifying country per DFARS 225.872-1(6), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content. This material has been inspected, tested and found in conformance with the requirements of the applicable specifications as indicated herein. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. All metal which is solution heat treated complies with AMS 2772. Any warranty is limited to that shown on Kaiser's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of Kaiser Aluminum Fabricated Products, LLC laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law. ISO-9001:2000 certified.

JAMES HEMENWAY, LABORATORIES SUPERVISOR

KAISER ALUMINUM
Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

# CERTIFIED TEST REPORT

Serial Number
4298676

## ALLOY LIMITS

| | SI | FE | CU | MN | MG | CR | ZN | TI | V | ZR | OTHER | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7075 | | | | | | | | | | | | |
| MIN(wt%) | 0.00 | 0.00 | 1.2 | 0.00 | 2.1 | 0.18 | 5.1 | 0.00 | 0.00 | 0.00 | EACH | 0.05 |
| MAX(wt%) | 0.40 | 0.50 | 2.0 | 0.30 | 2.9 | 0.28 | 6.1 | 0.20 | 0.05 | 0.05 | TOT | 0.15 |

Aluminum Remainder

## TEST NOTES

Metal represented by this test report was 100% immersion ultrasonically tested from one side with 3mm dead zones top and bottom and meets the Class A and Class B requirements of all specifications referenced on this test report. No surface marking of sonic indications is performed.

AEROSPACE M-31 CL

## CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC (Kaiser) hereby certifies that metal shipped under this order was melted in the United States of America or a qualifying country per DFARS 225.872-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content. This material has been inspected, tested and found in conformance with the requirements of the applicable specifications as indicated herein. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. All metal which is solution heat treated complies with AMS 2772. Any warranty is limited to that shown on Kaiser's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of Kaiser Aluminum Fabricated Products, LLC laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law. ISO-9001:2000 certified.

JAMES HEMENWAY, LABORATORIES SUPERVISOR

Castle Metals®

A. M. Castle & Co.

COPIE

# BORDEREAU DE MARCHANDISES



No de Formulaire d'Emballage / Shipment No:1904431

| Expédié de / Ship From: | Vendu à / Sold To: | Expédié à / Ship To: | Livré à / Deliver To: |
|---|---|---|---|
| A. M. Castle & Co. (Canada) Inc.<br>MONTREAL - CASTLE METALS<br>835-SELKIRK AVENUE<br>POINTE CLAIRE, QUEBEC<br>H9R 3S2 | DART AEROSPACE LTD<br>1270 ABERDEEN<br>HAWKESBURY, ON K6A 1K7<br>CA | DART AEROSPACE LTD<br>1270 ABERDEEN<br>HAWKESBURY, ON K6A 1K7 CAN | DART AEROSPACE LTD<br>1270 ABERDEEN<br>HAWKESBURY, ON<br>K6A 1K7<br>CA |

| Date d'expédition / Date Shipped | F.O.B. | Modalités de transport / Freight Terms | Transporteur / Carrier | No du Bon de connaissement / BOL No |
|---|---|---|---|---|
| 02-OCT-2013 | ORIGIN | Prepaid | MANITOULIN | 1904431-2 |

| Détails d'expédition / Shipment Details | Destination finale / Final Destination Branch - MON |
|---|---|

| N° de commande / Order No | N° de ligne Line No | N° d'article / Item No | Description |
|---|---|---|---|
| 3054685 | 1 | 752241 | 2.5000.PL.7075.T7351.ALUMINUM.USI.48.5000.144.5000<br>SPECIFICATIONS: QQ-A-250/12 |

| N° de bon de commande / Purchase Order No | Nbre de pièces / Part Number | Qté commandée / Ordered Qty | Qté Facturée / Invoice Qty |
|---|---|---|---|
| 21455 | YOUR ITEM NUMBER:<br>D6101-005 | 53.32 LBS | 53.3200 LBS |

**Détails / Details**

| N° de livraison / Delivery No : | Usine / Mill | No de coulée / Heat Number | Code méc / Mech Id | Pièces / PCS | Largeur (Pouce)/ Width (IN) | Longueur (Pouce)/ Length (IN) | Qté expédiée/ Shipped Qty(LBS) |
|---|---|---|---|---|---|---|---|
| 119232057 | KAISER ALUMINUM | 641303A3 | | 5 | 5.0000 | 8.2500 | 53.3200 |

Ces marchandises/technologies sont sujettes aux règlements de l'Export Administration et du département d'état des Etats-Unis. Si elles ont été/sont exportées, elles doivent se conformer à ces règlements. Toute modification du contrat de transport contraire aux lois des États-Unis est interdite.
These commodities/technologies are subject to US Export Administration & US State Dept. Regulations and, if intended for export, were/are exported thereunder. Diversion contrary to US Law is Prohibited.

Nous certifions par la présente que le matériel couvert par cette certification est conforme aux spécifications susmentionnées et aux exigences applicables pour le matériel, y compris toute spécification faisant partie de la description. Les rapports d'essai sont archivés pour fins de consultation. Toute requête concernant du matériel défectueux sera rejetée à moins qu'elle ne soit faite par écrit à A. M. Castle & Co. dans les 60 jours suivant la livraison. Le matériel coupé sur mesure ou coupé par le client ne peut être retourné pour crédit.
We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

| Ce matériel a été reçu et inspecté par<br>Reviewed by Authorized Castle Metals Representative: | | Date: | Name: |
|---|---|---|---|

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to US law prohibited.
Date Printed: 02-OCT-2013 11:47:11 AM

SHIP TO:
A M CASTLE & CO
14001 ORANGE AVE
P.O. BOX 1402
PARAMOUNT, CA 90723

SOLD TO:
AM CASTLE & CO- SOLD TO
1420 KENSINGTON RD
SUITE 220
OAK BROOK, IL 60523

KAISER ALUMINUM
Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

# CERTIFIED TEST REPORT

**Serial Number**
4298676

| CUSTOMER PO NUMBER: | WORK PACKAGE: | CUSTOMER PART NUMBER: | SHIP RUN/LOAD: | GOVT CONTRACT NUMBER: |
|---|---|---|---|---|
| 219455 | | 752241 | 102644/15 | |

| KAISER ORDER NO: | LINE ITEM: | SHIP DATE: | ALLOY: | CLAD: | TEMPER: | PRODUCT DESCRIPTION: |
|---|---|---|---|---|---|---|
| 1151938 | 1 | 22-MAY-2013 | 7075 | BARE | T7351 | Kaiser Select® Plate |

| WEIGHT SHIPPED: | QUANTITY: | TRUCK B/L #: | GAUGE: | DIAMETER/WIDTH: | LENGTH: |
|---|---|---|---|---|---|
| 1802 LB | 1 PCS EST. | 2042428 | 2.5000 IN (63.5000 MM) | 48.500 IN (1231.9 MM) | 144.500 IN (3670.3 MM) |

MHU 1684645: LOT 641303A3: 1 pieces;

## Certified Specifications

AMS 4078/RevJ
ASTM B 209/Rev10
BSS 7055/RevA
DPS 4.713/RevAK
GSS16100/RevG/Amd1
AMS-QQ-A-250/12
ASTM B 594/Rev09
CMMP 025/RevU
EAC MS1011/RevE
MMS 159/RevT
AMS-STD-2154/RevA
BAC 5439/RevH
CSTI 006/RevD
GAMPS 9101/RevB
PS 21211/RevL

**Test Code: 4297**

## Test Results

**Lot: 641303A3** **Cast 531** **Drop 08** **Ingot 1** **Melted in USA**

(ASTM E8/B557)
(EN 2002-1)

| Tensile: | Temper | Dir / # Tests | Ultimate KSI (MPA) | Yield KSI (MPA) | Elongation % |
|---|---|---|---|---|---|
| | T7351 | LT / 2 (Min:Max) | 69.8 : 70.8 (481 : 488) | 57.8 : 58.6 (399 : 404) | 11.5 : 11.7 |

(ASTM E1004)
(EN 2004-1)

| | | |
|---|---|---|
| Conductivity %IACS : | 41.2 Min | 41.5 Max |
| (MS/M) : | 23.9 Min | 24.1 Max |

(ASTM E1251)

| Chemistry: | SI | FE | CU | MN | MG | CR | ZN | TI | V | ZR | | OTHER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Actual(wt%) | 0.08 | 0.21 | 1.5 | 0.03 | 2.5 | 0.20 | 5.7 | 0.03 | 0.01 | 0.02 | TOT | 0.05 |

KAISER ALUMINUM
Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

# CERTIFIED TEST REPORT

**Serial Number**
4298676

## ALLOY LIMITS

| | SI | FE | CU | MN | MG | CR | ZN | TI | V | ZR | OTHER | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7075 | | | | | | | | | | | | |
| MIN(wt%) | 0.00 | 0.00 | 1.2 | 0.00 | 2.1 | 0.18 | 5.1 | 0.00 | 0.00 | 0.00 | EACH | 0.05 |
| MAX(wt%) | 0.40 | 0.50 | 2.0 | 0.30 | 2.9 | 0.28 | 6.1 | 0.20 | 0.05 | 0.05 | TOT | 0.15 |

**Aluminum Remainder**

## TEST NOTES

Metal represented by this test report was 100% immersion ultrasonically tested from one side with 3mm dead zones top and bottom and meets the Class A and Class B requirements of all specifications referenced on this test report. No surface marking of sonic indications is performed.

## CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC (Kaiser) hereby certifies that metal shipped under this order was melted in the United States of America or a qualifying country per DFARS 225.872-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content. This material has been inspected, tested and found in conformance with the requirements of the applicable specifications as indicated herein. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. All metal which is solution heat treated complies with AMS 2772. Any warranty is limited to that shown on Kaiser's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of Kaiser Aluminum Fabricated Products, LLC laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law. ISO-9001:2000 certified.

JAMES HEMENWAY, LABORATORIES SUPERVISOR

Castle Metals®

A. M. Castle & Co.

COPIE

# BORDEREAU DE MARCHANDISES



No de Formulaire d'Emballage / Shipment No:1904431

| Expédié de / Ship From: | Vendu à / Sold To: | Expédié à / Ship To: | Livré à / Deliver To: |
|---|---|---|---|
| A. M. Castle & Co. (Canada) Inc.<br>MONTREAL - CASTLE METALS<br>835-SELKIRK AVENUE<br>POINTE CLAIRE, QUEBEC<br>H9R 3S2 | DART AEROSPACE LTD<br>1270 ABERDEEN<br>HAWKESBURY, ON K6A 1K7<br>CA | DART AEROSPACE LTD<br>1270 ABERDEEN<br>HAWKESBURY, ON K6A 1K7 CAN | DART AEROSPACE LTD<br>1270 ABERDEEN<br>HAWKESBURY, ON<br>K6A 1K7<br>CA |

| Date d'expédition / Date Shipped | F.O.B. | Modalités de transport / Freight Terms | Transporteur / Carrier | No du Bon de connaissement / BOL No |
|---|---|---|---|---|
| 02-OCT-2013 | ORIGIN | Prepaid | MANITOULIN | 1904431-2 |

**Détails d'expédition / Shipment Details** | **Destination finale / Final Destination Branch** - MON

| N° de commande / Order No | N° de ligne Line No | N° d'article / Item No | Description |
|---|---|---|---|
| 3054685 | 2 | 752241 | 2.5000.PL.7075.T7351.ALUMINUM.USI.48.5000.144.5000<br>SPECIFICATIONS: QQ-A-250/12 |

| N° de bon de commande / Purchase Order No | Nbre de pièces / Part Number | Qté commandée / Ordered Qty | Qté Facturée / Invoice Qty |
|---|---|---|---|
| 21455 | YOUR ITEM NUMBER:<br>D6101-005 | 373.30 LBS | 373.3000 LBS |

**Détails / Details**

| N° de livraison / Delivery No : | Usine / Mill | No de coulée / Heat Number | Code méc / Mech Id | Pièces / PCS | Largeur (Pouce)/ Width (IN) | Longueur (Pouce)/ Length (IN) | Qté expédiée/ Shipped Qty(LBS) |
|---|---|---|---|---|---|---|---|
| 119232057 | KAISER ALUMINUM | 641806A5 | | 35 | 5.0000 | 8.2500 | 373.3000 |

Ces marchandises/technologies sont sujettes aux règlements de l'Export Administration et du département d'état des Etats-Unis. Si elles ont été/sont exportées, elles doivent se conformer à ces règlements. Toute modification du contrat de transport contraire aux lois des États-Unis est interdite.
These commodities/technologies are subject to US Export Administration & US State Dept. Regulations and, if intended for export, were/are exported thereunder. Diversion contrary to US Law is Prohibited.

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We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

| Ce matériel a été reçu et inspecté par<br>Reviewed by Authorized Castle Metals Representative: | | Date: | Name: |
|---|---|---|---|

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to US law prohibited.
Date Printed: 02-OCT-2013 11:47:11 AM

SHIP TO:
A M CASTLE & CO
14001 ORANGE AVE
P.O. BOX 1402
PARAMOUNT, CA 90723

SOLD TO:
AM CASTLE & CO- SOLD TO
1420 KENSINGTON RD
SUITE 220
OAK BROOK, IL 60523

KAISER ALUMINUM
Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

# CERTIFIED TEST REPORT

**Serial Number**
4297648

| CUSTOMER PO NUMBER: | WORK PACKAGE: | CUSTOMER PART NUMBER: | SHIP RUN/LOAD: | GOVT CONTRACT NUMBER: |
|---|---|---|---|---|
| 219455 | | 752241 | 102635/20 | |

| KAISER ORDER NO: | LINE ITEM: | SHIP DATE: | ALLOY: | CLAD: | TEMPER: | PRODUCT DESCRIPTION: |
|---|---|---|---|---|---|---|
| 1151938 | 1 | 10-MAY-2013 | 7075 | BARE | T7351 | Kaiser Select® Plate |

| WEIGHT SHIPPED: | QUANTITY: | TRUCK B/L #: | GAUGE: | DIAMETER/WIDTH: | LENGTH: |
|---|---|---|---|---|---|
| 1814 LB | 1 PCS EST. | 2042257 | 2.5000 IN (63.5000 MM) | 48.500 IN (1231.9 MM) | 144.500 IN (3670.3 MM) |

MHU 1681337: LOT 641806A5: 1 pieces;

## Certified Specifications

AMS 4078/RevJ
ASTM B 209/Rev10
BSS 7055/RevA
DPS 4.713/RevAK
GSS16100/RevG/Amd1
AMS-QQ-A-250/12
ASTM B 594/Rev09
CMMP 025/RevU
EAC MS1011/RevE
MMS 159/RevT
AMS-STD-2154/RevA
BAC 5439/RevH
CSTI 006/RevD
GAMPS 9101/RevB
PS 21211/RevL

**Test Code: 4297**

## Test Results

**Lot: 641806A5** **Cast 528** **Drop 17** **Ingot 5** **Melted in USA**

(ASTM E8/B557)
(EN 2002-1)

| Tensile: | Temper | Dir / # Tests | Ultimate KSI (MPA) | Yield KSI (MPA) | Elongation % |
|---|---|---|---|---|---|
| | T7351 | LT / 2 (Min:Max) | 70.1 : 70.5 (483 : 486) | 55.1 : 58.1 (380 : 401) | 11.6 : 11.8 |

(ASTM E1004)
(EN 2004-1)

| | | |
|---|---|---|
| Conductivity %IACS : | 41.4 Min | 41.6 Max |
| (MS/M) : | 24.0 Min | 24.1 Max |

(ASTM E1251)

| Chemistry: | SI | FE | CU | MN | MG | CR | ZN | TI | V | ZR | | OTHER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Actual(wt%) | 0.08 | 0.21 | 1.5 | 0.04 | 2.4 | 0.19 | 5.6 | 0.03 | 0.01 | 0.02 | TOT | 0.05 |

5/10/13

KAISER ALUMINUM
Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

# CERTIFIED TEST REPORT

**Serial Number**
4297648

## ALLOY LIMITS

| | SI | FE | CU | MN | MG | CR | ZN | TI | V | ZR | OTHER | MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7075 | | | | | | | | | | | | |
| MIN(wt%) | 0.00 | 0.00 | 1.2 | 0.00 | 2.1 | 0.18 | 5.1 | 0.00 | 0.00 | 0.00 | EACH | 0.05 |
| MAX(wt%) | 0.40 | 0.50 | 2.0 | 0.30 | 2.9 | 0.28 | 6.1 | 0.20 | 0.05 | 0.05 | TOT | 0.15 |

**Aluminum Remainder**

## TEST NOTES

Metal represented by this test report was 100% immersion ultrasonically tested from one side with 3mm dead zones top and bottom and meets the Class A and Class B requirements of all specifications referenced on this test report. No surface marking of sonic indications is performed.

## CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC (Kaiser) hereby certifies that metal shipped under this order was melted in the United States of America or a qualifying country per DFARS 225.872-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content. This material has been inspected, tested and found in conformance with the requirements of the applicable specifications as indicated herein. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. All metal which is solution heat treated complies with AMS 2772. Any warranty is limited to that shown on Kaiser's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of Kaiser Aluminum Fabricated Products, LLC laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law. ISO-9001:2000 certified.

JAMES HEMENWAY, LABORATORIES SUPERVISOR